

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



GODETIA.



JULY, 1885.

THE SPRING SEASON of gardening has passed, and during this time numerous cases of injudicious efforts in ornamental planting have been observed. There is a very general desire manifested by the residents of our large towns and villages to beautify the grounds about their dwellings, and this spirit, we are pleased to see, is also shared to some extent by farmers. Many who are willing to expend money for ornamental planting are deterred from doing so because they are not satisfied to undertake what they feel incompetent for, and therefore content themselves merely with a piece of well kept lawn. A few well arranged trees and flowering shrubs on such places would add greatly to their beauty and enjoyment. A great number of hardy and beautiful trees are cultivated by nurserymen and can be procured at little cost. For small grounds those kinds of trees should be selected that are low-growing, and there are plenty of them, both deciduous and evergreen. Both trees and shrubs, for the most part, should be planted in groups or masses on the borders of the grounds. When the space is sufficient a few trees of most elegant form can be set singly on the lawn. Flowering shrubs should be selected so as to present a variety, and to contrast in appearance, and to give a succession of bloom from spring to fall. Some of the

best planted places have the borders for a width of six to fifteen feet set almost continuously with flowering shrubs, with herbaceous perennial plants beneath and in front of them next to the lawn. This shrub border is kept in clean cultivation, no grass or weeds being allowed to grow in it.

The line between this border and the lawn is most pleasing when made in general conformation with the contour of the foliage, and the planting of the shrubbery should purposely be made so that it will present an irregular outline. The front of the shrubbery offers a home for hardy bulbous plants and a great variety of interesting perennials. This border will have the merit of showing something in bloom from the earliest opening of spring until winter sets in. It will also supply a great amount of cut flowers for the house which it would be otherwise impossible to have. It is easily kept in order. It also secures a little privacy, something which most people prize in a garden. At the same time from the street view there is a kaleidoscopic change of scene from week to week as the season progresses. Where no fences are kept up the tallest shrubs should occupy the central line of the border, with the lowest growing ones at the edges. Breaks can be left in the border where it may be thought desirable to

do so in order to allow a view through. In many places it may be undesirable from various causes to extend the shrubbery border along the front, when it may be confined to one or more sides of the lot. The exact arrangement will depend upon the circumstances peculiar to each place, and these are so varied, that there is no possibility of any dead sameness, and different tastes will produce a great difference of effects. This shrubbery with its edge of perennial plants is the foundation for a good and continuous supply of flowers through the season, and a plentiful supply of flowers at all times is one result aimed at in the best gardening. Many kinds of annual flowers that do not thrive when fully exposed to the sun, find a congenial home at the edge of the shrubbery.

Having a good collection of flowering shrubs and hardy herbaceous plants, which are no expense, except their care after their planting, one can appropriate an amount yearly to the purchase of Dutch bulbs, some flower seeds, and some summer blooming bedding plants, and have more flowers than for many times the same expenditure when the dependence is made entirely upon the annual plantings.

This style of planting good sized village and suburban lots has been growing in favor for a number of years, and at different times it has been brought to the attention of our readers; but to many, and probably most of them, it is yet strange, and it will require some leader in each locality to advance and set an example for others.

OUR COUNTRY CHURCHES.

The most beautiful specimens of cemetery grounds in the world are in this country, and in proportion to our population we undoubtedly have a great number of fine public school buildings, and commodious and handsome churches, but these belong principally to our cities and villages. The burying-grounds, the schoolhouses and the churches of the rural districts are, as a rule, as we all know too well, unworthy of our people. Scattered here and there about the country there are some fine exceptions of these public resorts in each division, and an illustration of one of these is given in the engraving of a country church, which has been prepared from a photograph. A handsome brick or stone church edifice clothed with Virginia Creeper is a beautiful sight, and there is no easier way to embellish such a building. The training of this vine on a wooden structure cannot, however, be recommended; but by means of wire frames, various kinds of climbing vines can be employed to a limited extent even in connection with wooden buildings. The Japan Ampelopsis can also be employed with the best of effect on brick and stone walls.

The idea of planting the schoolhouse grounds with trees and shrubs and flowers has been persistently advocated, and there is some advancement in this direction, though it is slow. Naturally we may expect that a similar improve-

ment may be extended to the church grounds. It is a work that all are interested in, and all can assist in. A great, bare building standing alone, without tree or twining vine to lend it grace, as the country church is usually seen, has little in its exterior to make it attractive, and there are few among us puritanical enough to think it better for the purpose it is designed for by reason of the poverty of its surroundings. Why should we not take a pride in making the grounds about the country churches neat and attractive? The stretch of straight board or picket fence usually seen on either side, and the carriage shed at the back can be clothed with hardy vines, such as Clematis Virginiana, Bignonia, or Tecoma radicans, Aristolochia siphon, Celastrus scandens, Periploca græca, Wistarias and Honeysuckles. Low-branched trees can be set in clumps, in such a way as to screen the carriage shed from the view in front; and about the church there can be groups low-growing trees and flowering shrubs that will make the place a scene of beauty instead of one of desolation, as it most commonly is. Such a work should be a work of love, and many hands could make it a light work. Our thoughts and aspirations in our visits to the place would be no less reverend for these pleasing surroundings, on the contrary, all experience shows that our sense of the beautiful



COUNTRY CHURCH COVERED WITH VIRGINIA CREEPER.

and our moral ideas are closely allied, and that the latter may be more effectually ministered to and advanced when

the former is satisfied. If the gates of Zion are beautiful we shall none the less sincerely enter its courts with praise.

GODETIAS.

The Godetias are annuals of a number of species, and most of them indigenous to the Pacific coast of this country. They are of free growth and easily raised in the garden from seed sowed early in spring where the plants are to stand, or in a seed-bed, and afterwards transplanted. Where the winters are not too severe the seed can be sowed in the fall, and the young plants will be ready to start into growth at the opening of spring. The soil for the Godetia is best when moderately fertile, as when very rich the plants make rank growth at the expense of the flowers.

The Godetia belongs to the Evening Primrose family of plants, but it does not, like the Evening Primrose, close its flowers during the day. The flowers of many of the species are quite showy, and several hybrid varieties have been origi-

nated which are particularly fine. Of the natural species some of the best are as follows:

G. purpurea, which grows to a height of two feet, having flowers of a glaucous or bluish green, and reddish purple flowers.

G. rubicunda attains the same height as the preceding species, and has large flowers of a ruddy hue, deepening into flame color at the center; a variety of this species, *G. splendens*, has a central spot on each petal, which is very large and very brilliant red.

G. Lindleyana, a very handsome species, leaves lanceolate, whitish; flowers rosy white, with a large purplish crimson spot on each petal, as shown in the colored plate in this number.

Besides the above, there are several more showy species, and there have

been originated in cultivation quite a number of beautiful varieties, of which the following are particularly desirable:

Duchess of Albany, having glossy, satiny-white flowers of very large size.

Lady Albemarle, brilliant dark crimson, with white center. The plant is compact in habit and free-flowering, commencing to bloom when about six inches high and continuing until about two feet in height, covering a term of two or three months. Plants sown at midsummer can be taken up in September and potted and cared for, and in due time removed in doors, where they will bloom in October and November. Seeds sown in the fall will provide plants for potting and

blooming early in spring in the window or greenhouse. This variety, on account of its showiness, has received especial attention for pot culture, though any of the varieties will succeed in the same way.

Bijou is a dwarf variety that grows only about six inches high, but forms a dense bush that covers itself with a multitude of flowers of the finest white with a dark rose spot.

Princess of Wales is a fine variety, a brilliant red.

The Bride has crimson and white flowers, and is highly prized.

The list is not exhausted, but those named are the most distinct and beautiful kinds.

THE GARDEN WORK.

The work in the garden for the present month will be of varied character, and none the less arduous than that of the month past. The hoeing and cultivating of most crops will be in constant demand, as the weeds will continue to assert strongly their rights, but if a drought should occur the necessity of stirring the soil will be greatly increased.

Celery can be transplanted until the middle of the month; it must have a rich soil, and plenty of water after growth starts, in order to get the best quality.

The winter Radishes and English Turnips can be sown until the last of the month. Use ashes or slacked lime to prevent injury from the Turnip flea or beetle.

Sow the Cos varieties of Lettuce for fall use.

Strawberry plants that have been fruited two seasons should be dug over, as there is no profit in keeping the plants longer. After the first season of fruiting the plats should be cleared of weeds and cultivated, and as many runners allowed to grow as may be desired. Some good cultivators have adopted, with apparently good results, the practice of mowing off the foliage after the crop is gathered, some even setting fire to the mulch that has been used and burning over the whole ground; the effect of removing the

old foliage being to encourage a better growth of new leaves.

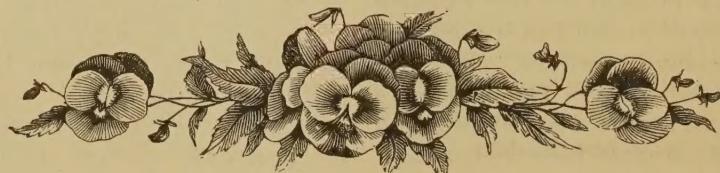
Grape vines will require attention in stopping and tying in the shoots. In locations where the rot is prevalent bagging the bunches will prove an advantage. One or two pound manilla bags are the best and cheapest for this purpose. Slip the bag over the young bunch and fasten it by folding over the upper corner and pin it; a hole cut in the lower end will allow water to escape, if it should find its way in. By this means the fruit is also guarded against birds and insects.

Sow Pansy seed any time this month for winter and early spring blooming.

Cuttings of soft wooded plants can be made during this month and next and rooted with little or no care in the open ground; watering, and a little shade at first, if the sun is hot, being all the care necessary.

Beds of foliage plants will need attention from time to time in pinching back the shoots to favor branching and produce an even surface of foliage.

Dahlias, Chrysanthemums, Gladiolus and other weak-stemmed, tall-growing plants must be securely tied to stakes. Keep the garden walks clean, and all parts of the ground neat and trim.



CORRESPONDENCE.

SMALL FRUITS ON THE FARM.

I always advise the growing of plenty of small fruit on the farm; not as a matter of profit in the way of dollars and cents, but because I believe that such products are conducive to the health and pleasure of the family, therefore profitable in the best meaning of the word. In no other way can so much variety in the line of food be secured. The woman who undertakes to set before a family daily, on a farm where little or no attention is paid to the growing of small fruits, a bill of fare which shall not be open to the charge of monotony, finds herself often at her wits' end to accomplish her undertaking. Potatoes, meat and bread and butter are all good in their way, but we tire of a repetition of them day after day, and wish there might be "something new." The skilful housewife will contrive various attractive dishes from the limited list of material which most farms afford during the winter, but she will sigh for "something new" also, for every woman knows how much easier it is to please the palates of the "men-folks" when she has a variety of material at hand to work with. With plenty of fruit canned or dried, at her disposal, she can concoct pies, puddings and sauces which will afford the desired variety, and act as "relish" for the more substantial articles of food. But on not one farm in ten, I think I can safely assert, is there small fruit enough grown to supply the family through the winter. This is not as it should be.

Some farmers are under the impression that there is a "knack" in growing small fruits, which prevents any but the professional grower from succeeding with it. Others think it is "puttering" work, like gardening, therefore they never undertake it. Some begin making a collection, but they soon lose their enthusiasm, and in a year or two the bushes they set out are swallowed up in a sea of grass, and they conclude it "doesn't pay to bother with it." It does not pay to "bother with it" in that way, but it does pay to

set out Strawberries, Raspberries, Currants, Gooseberries and Grapes, and cultivate them well. The amount of space and labor required is greatly over-estimated in the opinions of most persons who have no practical knowledge of small fruit growing. They have no idea of the amount that can be raised on a small piece of ground well cared for. The labor of attending to the plants is small. Give the plants you could set out on an eighth or a quarter of an acre of ground the same amount of care each year that you give your Corn, and you can grow small fruits to perfection. Let the soil be made rich and mellow to begin with; after that, keep the weeds down, and give the plants proper pruning or thinning out, and in some cases protection in winter, and that is about all you have to do. You can do all the work at times when you can not work to advantage in the fields. A half hour, now and then, with the hoe will keep the ground clean and mellow about the Currants and the Raspberries, and between the rows and among the Strawberries you can use a hand cultivator, thus making the labor easier and more expeditious. If every farmer would start a small fruit garden, I venture to say his wife would find some means of keeping it cared for, if he did not, before she would go without the products of it.

The expense is small to begin with. In many neighborhoods one can procure all the plants he cares for by digging them up, for owners of gardens always prefer to give away unneeded plants rather than throw them away, and most kinds will need thinning out yearly. But if one has to buy plants, the outlay is small, for dealers grow them so extensively now-a-days that they are very cheap.

With such a garden you can have fruit for table use all through the summer, and there can be enough canned for winter use with but little trouble or expense. When fruit is put up at home

you "know all about it;" if you buy canned goods, you don't know all about it. It may be good and healthy, and it may not.

Spring is the time when the family will best appreciate the products of the small fruit garden, for then the appetite is inclined to be capricious, and a sauce of well preserved Currants or Raspberries will act as an appetizer and a tonic. If more fruit were eaten in spring, and less

pork and other heavy, heating food, there would be fewer cases of "spring fevers" and attacks of biliousness. Fruit for the children is especially desirable. Most farmers raise Apples, but the family will tire of apple-sauce and apple-pie after awhile. With other kinds of fruit, there can be frequent changes made in the bill of fare, and the variety will be sure to be appreciated by all concerned.

—R. F. D.

THE LIMA BEAN.

The Lima Bean, in its several varieties, forms a class that is highly esteemed during its season, and is considered by all to be the most delicious and buttery Bean grown. It is thought to be quite a

point in good gardening to have these Beans as early in the season as possible, and in order to effect this desired object they should be given all the assistance one has at command. They should have a sheltered situation and a warm, deep, rich soil. The ground should be deeply dug or

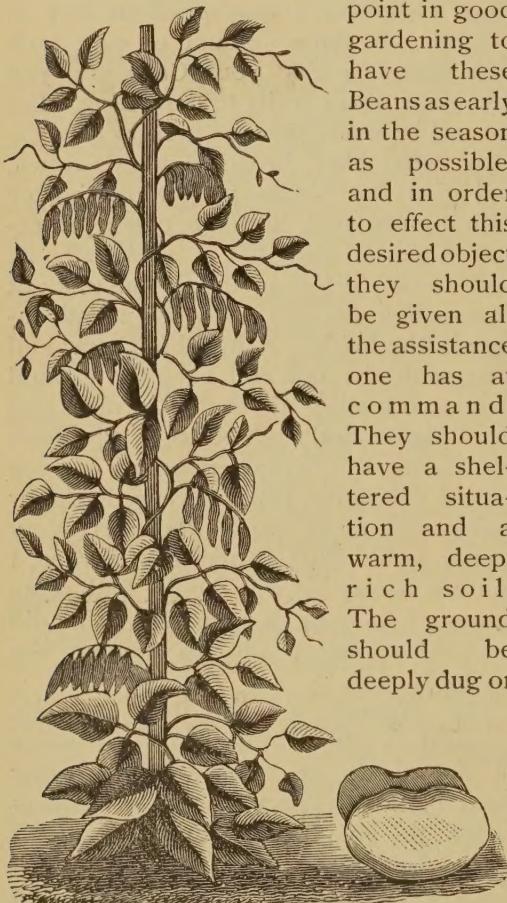
a slight hill. In these hills and around the poles the Beans are planted an inch or so in depth, placing some eight or ten Beans in a hill. In planting, be careful to place the eye of the Bean down, as this will enable it to vegetate much sooner and produce a much stronger plant. As soon as the plants are well up, and past all danger of being injured, all but three or four of the most promising should be removed, and as soon as they commence to run or grow rapidly, the young shoots should be tied to the pole, if necessary. All the attention they require after this is to keep them well cultivated and hoed and free from weeds, and as soon as the vines reach the tops of the poles, pinch off the ends; this will cause them to effect a more perfect growth below.

In order to have the Beans very early, it is advisable to start the plants in heat under glass, and this is best done by planting the seeds on small sods covered lightly with earth, and placed in a shallow box in a gentle hot-bed. Do not transplant them until the weather has become warm and settled. If this operation is carefully performed their earliness is increased some two weeks, and if Bliss' Extra Early is thus treated a gain of some ten or fifteen days more can be obtained. The following are the varieties, briefly described:

Large Lima—this is so well known as to need no description.

Small Lima, or Sewee—similar to the Large Lima in all respects, but produces Beans only half the size. It is considerably earlier and more productive than that well known sort, but inferior in flavor. Bliss' Extra Early Lima will, I think, eventually supersede this; planted at the same time, it is fully as early as the Small Lima, and is far superior in flavor.

Dreer's Improved Lima—Very produc-



LIMA BEAN—*PHASEOLUS LUNATUS*.

plowed and harrowed as early in the spring as possible, and marked off in rows four feet apart each way, and at each intersection a stout pole about six feet in length be firmly fixed. Around each pole place a good shovel-full of well pulverized stable manure, and thoroughly incorporate it with the soil, so as to form

tive and of superior quality, besides possessing the desirable habit of forming the Beans closely together in the pod. This and the following are the only two varieties of the Lima Bean worth the attention of amateurs.

Bliss' Extra Early Lima—Resembles the Large Lima in all respects, excepting that it is some ten or fifteen days earlier. Of superior quality and remarkably productive. This variety should be found in every garden.—CHARLES E. PARNELL.

THE ROSE AS A HOUSE PLANT—PRIZE ESSAY.

How can the Rose be best managed as a house plant, and what varieties are most suitable for that purpose?

Many a Rose lover, discouraged by repeated failure, has gazed with envy upon the thriftiness of some old fashioned Rose, crimson with its wealth of half-double flowers. The uncultured mind, whose one success it is, cherishes it as a miracle of beauty, and so it is, in contrast to its barren surroundings and the battered tin pail, its abiding place. One who is obliged to dwell in a habitation barren of luxuries, and without works of art which are abhorrent of steam, and a "best room," which monopolizes south windows, but having a lined box for the night protection of plants, may delight in Roses with comparatively little trouble.

The power to command a conservatory ought also to command knowledge and appliances that will make work easy. I address my topic to the difficulties, so much more numerous, that beset ordinary house culture, with its rooms papered and carpeted, and its cherished bric-a-brac.

All Rose culture must compass certain conditions; good soil, fresh and well tempered air, moisture, protection from all enemies, and, for abundant flowers southern sunlight. If you procure your plants growing in pots from the greenhouse, keep them by themselves for a while, giving them special care, until you are sure that no insects lurk among them, and that they may not drop their foliage, through change of atmosphere. If your plants come by mail do not unpack until you can give them attention. Let them lie in tepid water while you prepare the pots. Nearly all florists direct us to place the plants in pots as small as possible, but, I think, in the dry air of the house, pots somewhat larger, with bits of charcoal, bone burnt or raw, and gravel for drainage, give better results.

You do well to exercise care in the soil for the Rose. For me, a mixture composed of rich clay in much the largest proportion,

a little leaf-mold from the woods, and soil from the grassy edge of a barnyard, the soil being very sandy, has proved best, though I have secured excellent growth from the latter alone, using larger pots in succession. Spread the roots naturally, sprinkle in the earth, pressing it firmly into place, shower, and set your plants, if possible, in an east kitchen window. Here the steam and heat are more likely to accord with the treatment which they have formerly received. Do not water again at the roots until dry, but sacrifice your window, giving the foliage, likewise the window, a fine, misty shower every afternoon until all is well. For this you may use a syringe or small whisk broom.

If there is the least hesitancy in growth, or the leaves droop, wash daily with a soft brush or feather, rinsing it constantly, and never using the water for a healthy plant after one that is drooping. If any flower buds start, remove them immediately, and cut back the plant promptly to the buds that show quick and thrifty growth.

After plants are growing where you wish them to bloom, they will need constant protection against the invasion of all enemies. I rid my plants of aphis, etc., most effectually in the fall by destroying all the little flies that sport upon the window just at twilight, when the plants are first brought within. In fact, strict attention at an early stage of growth saves later a great deal of work in all directions. Yet be always vigilant, else the minute bud will disappear so quickly you will think yourself deceived, or the bud whose unfolding beauty you are ready to enjoy will turn to one side and refuse to open, while you may visit your disappointment upon the aphis, waxed corpulent at its base. Dipping the branches in weak tobacco water is an excellent preventive, but you may better enjoy the sweetness of your Roses by watchfulness.

The red spider, with me, is somewhat annoying. Immersing plants in water when small, and showering them when larger, will check the pest, or you

may hold your plant firmly in position and rinse the tops in weak soap suds. I resort to my brush, washing stems most thoroughly, since by dislodging insects the new points of growth gain opportunity to start. You will find spiders most numerous at the back of the leaf at the base, and along the mid-vein, their webs being mostly upon the old growth and where over hanging leaves have afforded shelter. As you look through your plant to the light, remove gently the seeming particles of dust upon the new growth, making sure they have no life. Pick and burn all yellow or fallen leaves.

Against mildew, I find sufficient protection by rubbing flowers of sulphur upon the first leaf which shows infection, at the same time powdering plant and surface of the soil so lightly that it is scarcely discernible. With the plants free from insects, if there is not satisfactory growth, one would be warranted in suspecting worms in the soil. I receive most speedy improvement by soaking the soil, draining or skimming off any animal life that may arise, then applying a thin coating of finely pulverized soot. Again, I thrust the phosphorus ends of a few matches in the pots, and saturating the soil with lime water is excellent, seeming also to give a beautiful verdure to the foliage. A few drops of carbolic acid solution added in watering plants is freely and successfully used by some, but it needs caution. It surely kills the worms, and may be used in severe cases upon old Roses without injury, but if any of the strong particles touch new or fleshy growth it is immediately blighted.

If you cannot shower your plants where they stand, remove them and shower them thoroughly as often as dry. The water from melted snow gives most thrifty results. Wipe off shelf and all surroundings with a damp cloth.

If, like myself, you reside in the bleak Northwest, you must provide against chills and severe draughts, especially upon buds. Let all soaking and showering be done with tepid water and when you can insure mild temperature. There must be fresh air, of temperature not often above 70° in the day time, cooler at night; but we, with our western winds, and temperature that hovers too frequently around the minus forties, can only withdraw our treasures to a safe position,

daring seldom to leave them near the glass at night.

If you wish to keep a large specimen, as a Marechal Niel, and weight is an objection, place it in a tin dish with ample surface and thorough drainage. Like the Fuchsia, the Rose delights in tin, and you can cover, paint tidily, or with good taste decorate, and the beauty of your plant will silence criticism. Later you may provide a box upon castors. Usually one will gain more satisfaction from a greater variety in smaller pots.

Roses incline to periodical blooming, with one longer season of rest each year. This longer season you may arrange at your pleasure, by denying free growth and blooming until you wish. Observing in the garden you will note that they send forth most rapidly the shoots bearing flower buds after a rainy season. When the buds are well towards blooming and for a space of time lasting until a few days after the flowers are cut, I do not urge them, but afterwards shower and add fertilizers. You may fertilize very freely at any time when there is thrifty growth, for the Rose is a luxuriant consumer of food. If you desire speedy succession of bloom, you must place your plants every day the same side to the light especially if you have only an ordinary window. Sometimes, when all has been done, a choice bud will refuse to expand. Keep all buds well washed, and you may assist by breathing into them, by carefully manipulating, or, if the calyx adhere, gently separate it.

The faint-hearted may count this care altogether too much trouble, yet a dozen Rose plants surrounded by most adverse circumstances, with active, intelligent care, will not require over an average time of five minutes each day; and if thus we can secure abundant bloom, how much more easily may it be done under favorable conditions.

As to the second division of my subject, individual taste has such variety that it is difficult to suggest. My own experience has so fully satisfied expectations that I incline to advise from it. Consult the descriptions of reliable Rose growers, comparing and choosing no novelties, unless you desire to experiment. You may rely upon the old, "profuse bloomers," Safrano, Bon Silene, Hermosa, Madame Margottin, Madame Rachel, etc.

Experience often differs in respect to varieties, for the reason, perhaps, that plants rooted from cuttings sometimes possess diverse tendencies; as one shoot from Perle des Jardins gives us the new Sunset, and, as one may often observe in a bush of two branches, where there is a constant recurrence of bloom upon one and little or none on the other. It is better not to expect as many flowers upon the choicer varieties as upon the old Sanguinea, though, possibly, some varieties may bloom as freely.

La France is sure of favor; Catharine Mermet and Perle des Jardins are beautiful in bloom, and their attractive foliage is a source of constant pleasure. The Marechal Niel secures to me its favor by its fragrance, which is unsurpassed.

A few of the freer blooming varieties in pots, plunged in the open border, will supply steady bloom from June until December, when they may be removed to the cellar. This season, an unusually trying one in the northwest, a Bourbon Queen, which bloomed freely the latter half of summer in a five-inch pot, gave no opportunity for removal, except at expense of bud or blossom. La France, which bloomed sparingly late in the fall, was reset into a seven-inch pot, and it came into active growth and showed its flower buds the first of January. All buds, in this latitude, increase in size very slowly during December, but the approaching sun speeds them swiftly into bloom.

Read and study. The catalogues of florists are very valuable, as you may readily discover if you give them consideration. All real flower lovers are generous of their knowledge and experience. Choose in accordance with your taste and surroundings, or, if you cannot decide, state them to the florist from whom you buy, and he will select wisely for you. Few pleasures are so cheaply bought as the enjoyment of these plants, which have been brought through all the tedious stages of their first growth.

If I were so unfortunate, as to fail in blooming my Roses in winter, I should bed out my plants in the spring, layering branches for new growth, studying their habits more closely that I might provide more suitable conditions, meanwhile enjoying the flowers Dame Nature would be sure to bring.

I know no plant so sensitive to sympathetic treatment as the Rose, so quick to resent an injury, and yet so tenacious of life, even when reduced to the barest stalk, and so ready to forgive and send forth its blossoms with the first attention. Intimate acquaintance will enable you to discern the drooping that indicates its poor health as readily as pallor in the face of a friend. How far will power may influence vegetation, it may not be well to theorize, but I am sure that if you truly love Roses, you and your household may revel in their sweetness.—

FLORA F. DORWIN, *Durand, Wis.*

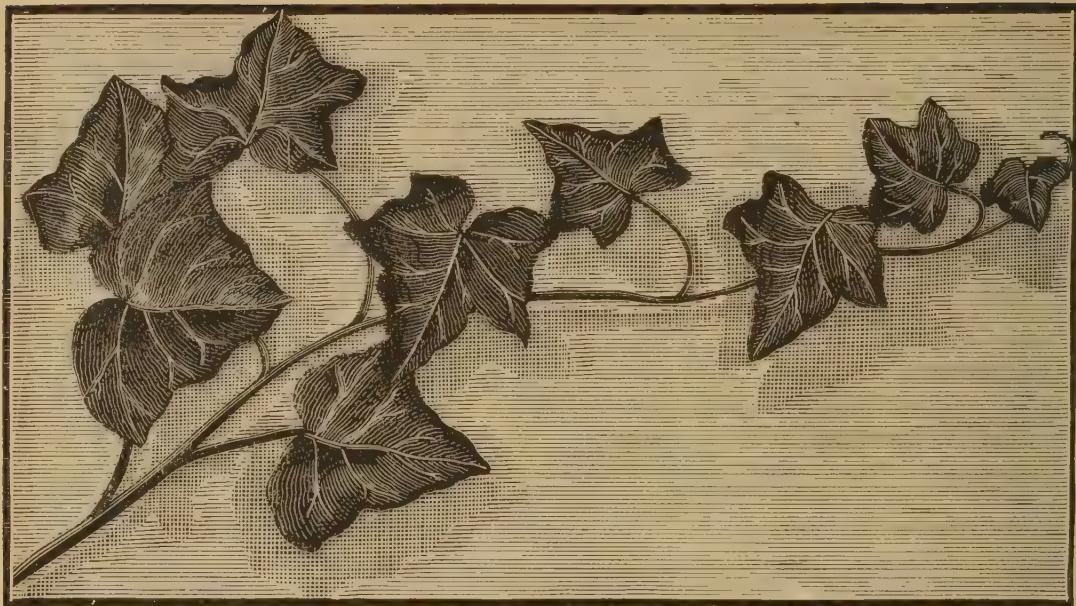
PLANTS FOR THE AMATEUR.

There are certain plants that the amateur can successfully grow, and there are those that should only be handled by an expert professional grower. An amateur has no more business attempting to cultivate plants beyond his scope than a person unlearned in the practice of medicine has in administering other than simple remedies to a patient. They, either of them, may wish to experiment and try their success, but oftentimes the patient is made to suffer in consequence, and no satisfactory results are achieved by the experiment. By the amateur, I mean one that has simply a bay window, or small conservatory, that must depend upon the surplus warmth from the adjoining room for heating. I do not expect to mention all of the plants that are desir-

able for such a situation, but will give a few that seem to belong to the category of house plants.

First, plants that may properly be called foliage plants, that are not expected to blossom, but furnish a background to "set off" their more gay and showy neighbors. We will have an English Ivy to train around the windows. It takes no room, excepting for a corner in which to put its foundation. We do not want one of the scraggy, leafless vines, but a good healthy plant that grows and develops new leaves instead of simply trying to hold and keep green the few which it has. It needs good rich food and will gladly compensate for the extra pains taken with it.

Nothing can be more graceful and

ENGLISH IVY, *HEDERA HELIX*—REDUCED SIZE.

beautiful than a well filled pot of Maiden-hair Fern, not the common sort that grows in the woods, but the variety that is commonly grown in the greenhouses. It is easy of cultivation, does not require sun, but is a thirsty plant and likes a drink upon almost any occasion. Notwithstanding its many desirable qualities it is rarely seen among house plants.

A plant that is more often grown in the house, and which merits a great deal of praise, is the Farfugium. A well developed plant is beautiful, and will thrive with simple, common sense nursing.



FARFUGIUM GRANDE.

The Smilax, *Myrsiphyllum Asparagooides*, is easily propagated from seed, and the second year, at least, will afford a wealth of delicate green. It requires no sun especially, but relishes a plenty of water; particularly ought the leaves of this plant to be occasionally syringed, to protect them from the ravages of the red spider. The plant needs its periodical rest, and will give one fair warning by the leaves turning yellow and growth stopping.

A shallow vessel filled with Lycopodium is quite satisfactory.

For flowering plants, affording a continuation of bloom, a little planning is necessary. The saying, "You cannot eat your pudding and have it, too," is very applicable to the growing of Geraniums. One cannot expect to have them bloom all summer out of doors, lift them into pots and have them continue their



CHINESE PRIMROSE.

good behavior. It is well to plant them out during a portion of the summer, but care should be taken to keep the flower buds pinched out, in order to have them bloom early. They should be potted in season, so that they can recover the shock and form buds before they are removed to the house. Then they will furnish flowers for some time. There will come a lull, however, during the latter

part of December and January, when the sun sparingly sheds his rays and but few flowers will appear, and some other plant must be brought into requisition.

Seeds of the Chinese Primrose may be sown in May or June, careful attention



CINERARIA.

paid to the young plants, and in December they will commence to bloom, and not once in all winter do they become discouraged and abandon their mission of producing their modest blossoms. Of course, these plants afford only single

flowers, but I think they are preferable to the double ones. There is always quite a variety in the tints and shades produced upon the different plants. After serving in such a generous manner, they, too, need a season of rest, and may be planted out in some shady border, and upon being repotted in the fall will continue their missionary work.

The Cinerarias are readily grown from seed, and although they are not quite as satisfactory as some other plants, still they do the best they can, and fill a niche of their own.

Several varieties of the flowering Begonias are, in themselves, handsome ornaments for any room, and specimen plants can be grown with a little care and attention, that will deserve the admiration of any one who has an appreciation of beautiful things.

The Calla is always a welcome occupant of the space allotted to it, and it seems as if the more unpracticed the grower the better will it thrive. I would have a Calla, if for no other purpose than as a foliage plant.

Other plants there are, of course, that are as good as the ones mentioned, but the plant room ought not to be crowded, so we will leave the remainder from which to make another collection.—MRS. CHAS. W. GARFIELD.

AROUND THE HOUSE.

Little wonder that many farmers' wives wear out, grow prematurely old, or die young. There is absolutely nothing attractive for them to look at about the premises. The yard has never been properly graded, and if mowed at all, it is but once a year; generally the horses are turned in it to graze it down. Sprouts have come up from the old fruit trees, branches broken down by the weight of fruit or winds of former years, are hanging with their tops resting on the ground, and Burdock and other hardy weeds grow up through the dead branches. A dismal picture, but too often true to life.

Two things alone will make a yard beautiful if well arranged and cared for, trees and grass; but the trees must not be in stiff, unnatural rows, nor crowded close to the house, and the yard must be well graded, and the grass kept closely cut.

Flowers will usually give a better effect and be much easier to care for if planted in a small garden than if the lawn is cut up in small beds. The garden can be kept clean much easier, as the grass will be continually encroaching on the small beds. A single square rod will enable you to grow quite a variety of flowers, but several rods ought to be spared for this purpose. Locate the flower garden where the wife can see it when about her daily work, and it will prove a means of grace to her. A very little work done at the right time will keep it in order, and if weeds are never allowed to go to seed in it, the labor of caring for it will be less each year. I cannot think of any other way in which so small an expenditure of time and money will bring so much pleasure to the wife and education to the children. Try it, and see how much genuine happiness can be had from a little

flower garden. What trees shall we plant and how place them, is always a seasonable question. There are thousands of bleak, bare door yards which ought to be supplied with trees. A few directions may be helpful to the inexperienced. Do not plant too near the house. A tree to remain permanently should not be less than thirty feet away. If shade is what is wanted soon, quick growing trees, like the soft Maple, may be planted closer, to be removed as soon as the more permanent trees are large enough to furnish shade. Avoid trees of soft wood, like the Soft Maple and Box Elder, as they are too liable to be broken by sleet or wind and rendered unsightly. If I were limited to three trees, I would choose the Elm, Hard Maple and Ash. The first for its lithe, spreading branches, graceful contour and great size, the others for their toughness, gracefulness and beautiful autumn foliage. Evergreens I would plant only for protection from prevailing winds in groups or rows to the

north and west, and one hundred feet or more distant from the house. If the grounds are large enough a quarter of an acre set apart for the planting of as large a variety as possible of native trees will give a good effect. I have growing on such a plat Hard and Soft Maple, Catalpa, Ash, Elm, Box Elder, Hickory, Dogwood, Wild Crab, Pawpaw, Persimmon and Tulip tree, and hope to add other varieties.

The time for tree planting is so short, and so many things crowd at this season, that unless you plan for it beforehand there is danger of this work being neglected. If your trees are to come from the forest, go out the first pleasant day and select them and stake out the places where they are to be planted. The stakes will be constant reminders of the work and you will be less likely to forget it for driving them. Determine now that this year shall not pass without making a beginning in beautifying your home.—WALDO F. BROWN.

THE ROSE AS A HOUSE PLANT—PRIZE ESSAY.

How can the Rose be managed as a house plant, and what varieties are most suitable for that purpose?

The only Roses that are likely to succeed when grown in the window garden, are a few varieties, and those belong to the Tea, Bourbon and Bengal classes. And to have them do well in the winter it will be necessary to commence preparations early in the spring, in order to have strong and healthy plants furnished with an abundance of healthy working roots, for the Rose is rather impatient when grown as a window plant; but a great deal will depend upon the treatment the plants receive.

Having procured the young plants early in the spring, they should be potted into three-inch pots, and placed in a warm and sunny situation. Water should be given when required and air on all favorable occasions. About the middle of May the plants should be repotted into four-inch pots and plunged to the rim of the pot in any sunny place in the open ground. After the plants are plunged they should be well mulched with coarse stable manure, and watered whenever necessary, and the very instant any flowers are noticed they should be re-

moved. The pots should be turned at least once a week, in order to prevent the plants from rooting outside the pots to their manifest injury. This treatment should be continued up to the first of September, when the plants should be taken up and carefully examined, shifted into larger pots, if necessary, trimmed into shape, and placed in any sheltered situation until they are brought inside, which should be done before cold weather sets in, if they are intended for early blooming; while those intended for later bloom can be allowed to remain outside until the weather becomes cold, when they can be removed to a light, cool cellar and afterwards be started into growth whenever it is deemed necessary to do so.

When brought inside they should be given a light, sunny place, windows having a southern exposure being preferred, and an average temperature of 50°. Water should be given as often as necessary, and two or three times a week liquid manure water. In watering, care must be taken not to render the ground cold and sodden, for water should never be permitted to remain around the roots for any length of time.

When grown inside, the Rose is very



A GROUP OF TEA ROSES.

subject to the green fly and red spider, and I do not know of a more effectual remedy than Gishurst's compound applied according to the directions that accompany each box. This compound can be obtained at any seed store, and is the most effectual remedy for use in the window garden that I know of. Or the green fly can be destroyed by a slight fumigation of tobacco, and the red spider by freely syringing the plants with soapy water. In the window garden mildew is apt to be rather troublesome; this is caused by sudden changes in temperature as well as by damp, cloudy weather. For this, sulphur is an effectual remedy, and it can be easily applied by dipping

the affected plant in water and then dusting it with sulphur.

The ensuing spring, as soon as the weather has become warm and settled, the plants should be turned out of their pots, and all the soil carefully removed from their roots. Then repot them in pots a size or two smaller, using fresh soil, and plunge and treat precisely as you did the year previously. About the first of September the plants should be taken up and repotted into pots of a larger size and trimmed into shape, the old wood and long, scraggy branches being cut back to within five or six eyes of the main stems, then water thoroughly, place in warm, sunny place, and bring in-

side before cool weather sets in. This treatment can be continued as long as the plants continue to grow strong and healthy, and when they cease to do this either plant them out in the flower border, or else throw them away and supply their places by those that are fresh and vigorous.

Roses require a rich, well mixed soil, the most suitable being composed of two-thirds well decayed sods from an old pasture, one-third well decayed stable manure with a fair sprinkling of bone dust, mix these materials thoroughly, and use the compost rough. In potting, use porous or soft baked pots, and let them be proportionate to the size of the plant. Be certain to drain the pots well, and in potting place the plant in the center of pot, and water thoroughly to settle the plant.

The following varieties are the most suitable for window garden cultivation: Twelve Teas—Safrano, Bon Silene, Isabella Sprunt, Rubens, Odorata, Perle des Jardins, Gen. Tartas, Yellow Tea, Ma-

dame Bravy, Madame de Vatry, Madame Lambard and Souvenir d'un Amie. Four Bengals—Queen's Scarlet, Douglass, Duchess of Edinburgh and Ducher. Four Bourbons—Hermosa, Queen of Bourbons, Queen of Bedders and Edward Desfossés. Besides these there is a class of recent introduction, known as the Polyantha Roses; they are of dwarf habit and are continually in bloom, the flowers being produced in clusters, and although the individual flowers are not large are very perfect. Of these, the most desirable are Mignonette, rose, Mlle. Cecil Brunner, salmon pink, Little White Pet, light pink, and Paquerette, pure white. Besides these we have the dwarf form of Rosa Indica, commonly called the Fairy Rose. It is a very pretty little miniature Rose, having double, rose-colored flowers, about the size of a dime. As it is constantly in bloom it is a plant that will always attract considerable attention, and is deserving of a place in every window garden.—CHARLES E. PARNELL, *Queens*, N. Y.

A FEW GOOD SPIRÆAS.

The Spiræas form a beautiful family of shrubs of easy culture; they will grow in any kind of soil and will amply repay the little attention which they require, which, in Kansas, is simply mulching during the hot months of summer, and careful pruning immediately after they have done flowering; in the eastern part of the country mulching is not necessary. Not only is the bloom rendered more abundant the year following, but their remarkable and distinct foliage is greatly improved.

S. Thunbergii is the harbinger of spring. The pure white sprays covering the neat, dwarf bush. The narrow, linear, fern-like foliage is very pretty, which changes to red and yellow during the autumn.

S. prunifolia fl. pl. should be planted in every door yard and upon every lawn. Blooming early in May, it is a desirable shrub to have in every collection; its flowers are very double, like small, white Daisies.

S. Reevesii fl. pl., one of the best, with pretty foliage and large round clusters of double flowers of the purest white. Requires slight protection during winter.

S. Van Houtei, a strong grower, with pretty foliage; densely covered, in May, with pure white blossoms in clusters. This is a fine species, and one of the best flowering shrubs in cultivation.

S. trilobata always pleases; there seems to be a charm about the graceful curves of the branches, the delicate foliage, and the attractive setting of the flowers. The branches bend almost into semi-circles, these being laden with exquisite rosettes of pure white flowers.

S. eximia, of dwarf habit, producing spikes of bright rose-colored flowers in June.

S. Fortunei, attractive, highly colored foliage, which renders it conspicuous even when it has ceased to bloom. The flowers are a rich red color.

S. Douglassii is one of the most desirable, as it produces an abundance of rose-colored spikes during June and July.

These I consider the cream of about thirty species and varieties under cultivation at this place. Shrubs like these should not be neglected, which I fear is too much the case, but ought to be cultivated by every lover of the beautiful.—J. W. ROBSON, *Cheever, Kansas*.

FRUIT SYRUPS.

Correspondents inquire with so much interest for the mode of making Grape syrup and other fruit preparations, that it is a pleasure to introduce things certain to prove of service. Grape syrup, or fruit syrup of any kind, is not jelly, but the pure juice boiled down without sugar till it thickens like Maple syrup. All fruits have their own sugar, which may be condensed by long evaporation, making the most delicious and healthy form of preserves.

Pick over the Grapes, rejecting all unsound ones, and press in a cloth in any convenient way, the old wooden screw press being much better than anything with metal about it, which gives a harsh flavor. Strain the juice into a porcelain kettle, or, what is better, a thick, shallow stoneware jar, holding four gallons or more, heat quickly and boil hour after hour steadily, without scorching. Stoneware holds the heat and is less apt to burn juice or jelly than any stoveware. The juice cooks best set in the oven, out of dust, where no draft can check its boiling. All syrups evaporate faster in certain states of the atmosphere than others, and a clear, drying day, or one just before rain, when the water boils away fast in the tea-kettle is the chosen time for all preserving. Making syrup is an all day affair, and a good plan is to set the jars of juice in the oven at evening and keep a low fire all night, finishing off next forenoon. Six quarts of Grape juice should make one of syrup, wine-colored, lucent, of delicious, refreshing perfume and flavor. One tablespoonful in a glass of water gives a delightful drink, like fresh Grape juice, the true substitute for wine with all temperate people, and the finest medicine for correcting a feverish, bilious state ever known. The syrup itself is valuable for restoring strength, and consumptive persons should take it by the tumbler daily, sipping it leisurely, with sugar, if too tart for the taste. It makes new, rich blood, it cleanses the system, clears brain and feeds starved nerves. It has the hypophosphites which doctors prescribe for wastes of tissue, and taken freely will arrest even critical stages of disease. People fed on pure food with abundance of fruit need never dread cancer, Bright's disease, gout, neuralgia, dropsy, or a dozen other of the worst scourges of the race.

All fruits, save Lemons, perhaps, will turn into syrups with long boiling. Watermelon juice, you know, makes a very good molasses to eat on cakes. Peach syrup is delicious, and so are Pear and Apple syrups, as you know by the candied juice in the pan of baked fruit left long in a mild oven, without sugar, except that of their native sap. This bakes into a clear, leathery substance, like Jujube paste, and Turkish women prepare a dozen of these fruit pastes from Figs, Plums, Nectarines, Melons and things of which we hardly know the names, but which have a European repute for choice desserts. Healthier food, or more delicious, the skill of man does not afford, and the best of it is, these preserves and confections need no expense of special pans and boilers, or great skill to make them. A shallow stoneware crock over a slow fire, the juice from ripe, sound fruit strained through a cloth, skimming, if any froth rises, and care not to scorch the pan at any time, will insure good results.

Cherries are better dried than preserved any other way. No fruit keeps its flavor and substance so well in drying, and the price ought to pay any one. I will guarantee sale of all the dried Cherries that can be put into market in America, this year, for at least twenty-five cents a pound. The best housekeepers know that Cherries with stones left in are finer for stewing than pitted ones, for the kernel adds a richness to the juice, and a strengthening agent for digestion lost by the more troublesome process. I believe there are housekeepers who would like their Cherries peeled, if it were possible, and plume themselves on their superior nicety in the matter. Better leave off some of this painful precision about paring and stringing fruit, and bestow the care on points more neglected. For instance, fruit ought to be far more carefully selected for eating and preserving than it is. The markets are full of fruit the year round which I should hesitate to feed a well reared cow. Such fruit is responsible for cramps, gastric irritations and irregularities. It is only fit to ferment for spirit to make perfumes and cleansing fluids, or for laboratory use.

Never fear raising too large fruit crops. The condensed fruit juice can be stored in so small space and bear packing so

well it will be a staple supply for army use, long voyages, miners and construction camps, cold fruitless regions, and the greater part of the world which is not favored enough to raise fruit for itself. No fuss of canning is needed, for the work. Grape syrup will keep in a keg or stoppered jug in a cool cellar the year round, if it has the chance; but let heated, thirsty hay-makers or harvesters taste a goblet of cold well water flavored and acid with Grape or Plum syrup or cider jelly, and the chances of that season's supply taking harm are very small. It will strengthen the weakly women working in hot kitchens, and keep the children from feverishness and "rashes" and "prickly heat," if allowed to drink as much of the diluted juice as they will.

I will add, that if any one wishes other information about the process of making

or marketing fruit pastes, syrups, or drying fruit, it will give me pleasure to answer private letters on the points in question. Only don't apologize for asking, it takes time to write three or four lines of apology and time to read it. When one offers to answer questions an apology is foolish or an affront. I have no more objection to doing a convenient thing for others than you have or any other decent person. And please don't make any effort in return. I am already obliged for a score or so of generous offers of plants, roots, etc., made by unknown correspondents over a year since, not one of which was ever received. A postage stamp for answer is a matter of course, and "I have them that will baith write and rin for me," to paraphrase Meg Merriliees.—SUSAN POWER, *Walnut Hill, Mass.*

THE LEMON VERBENA.

There is, perhaps, no other shrubby plant that is quite so attractive during the summer, in our Southern States, as the Lemon Verbena. It stands the heat and the dry spells better than any other I can think of. Its foliage alone would make it desirable, from the delicious fragrance of its leaves; but the delicate blooms, with a subtle fragrance of their own, different from that of the leaves, are produced in profusion late in the season.

If the ground be properly spaded and enriched, the Lemon Verbena will grow to the height of five or six feet, making a robust shrub, from which additions to choice bouquets may be made whenever desired, in the shape of fra-

grant sprigs or beautiful spikes of bloom.

This plant is nearly hardy in this State. A very slight protection of the roots is all that is needed to keep it alive from year to year. Frequently plants will survive the winter without any protection.

I have heard that a tea made from the leaves of the Lemon Verbena is a remedy for nervousness, but of this I cannot say. I know, however, that the infusion is rather agreeable to the taste.

Cuttings of the Lemon Verbena stuck in the ground in the fall, or in a box in a pit or greenhouse, will be almost sure to sprout in the spring. Cuttings will also live taken from the bush in summer, if kept damp in a shaded place.—E. B. H., *White Plains, Ga.*



FOREIGN NOTES.

BONE MEAL.

A correspondent of the *Journal of Horticulture* gives his experience with bone meal, having tried it in comparison with two artificial manures on a lawn. All of the manures were applied at the same time in March, on separate parts of the lawn, and he remarks, "the two artificial manures had decidedly the best of it for the first season. The bone meal did not improve the appearance of the grass in the least, while that treated with artificial manures displayed a marked improvement. The bone meal produced more effect the second season than the artificial manures had the first, but the latter were evidently exhausted the first season. The third season, again, told in favor of the bone meal, and what will be the case this year remains to be seen. Similar experiments were tried with Peas, Onions, Lettuce and Cauliflower, and other vegetables, which resulted in favor of the two artificial manures, the bones evidently making no difference.

"These observations and experiments prove that bones, however fine they may be ground, do not act in any marked degree during the first season, but prove an invaluable lasting manure."

The conclusion was also reached, very properly, that for pot plants, when an immediate effect is desired, bone meal is without value, and artificial manures that will act quickly should be employed in such cases.

ORCHIDS FASHIONABLE.

Fashionable flowers as the Orchids may be, the mere fact of their being expensive to purchase, and the more expensive to cultivate, has given them a fictitious value in the eyes of unthinking people. As a recent writer expressed it, "the Orchids are not more beautiful than the Irids, but they are ten times more expensive to grow." Let those grow Orchids who admire them, by all means; let them weed out their bad varieties for the encouragement of the new beginner, for after all, it is, perhaps, better to spend money on Orchids than on horse-racing. There is no

gain-saying the fact that some Orchids are exquisitely lovely—strange beauties in a strange land. What I argue is, that Orchids are usurping the places of other plants equally, if differently, beautiful. We have fifty collections of Orchids in England, but no one collection of green-house or stove bulbous plants, and I know of no amateur rich enough to found a good garden for economic plants. Those who will look long enough and close enough at the golden Orchids may see more than a grain of truth in this matter.

The Orchids certainly deserve all the respect that a lover of all flowers can give them, and I have done my best not only to love them, but also for the last twenty years to praise them, but I am not of those enthusiasts who "empty the purse of Croesus into the coffers of the Orchid merchants." There is a tendency just now to over-rate both the beauty and the value of Orchids. Of course, if any individual likes to spend thousands of pounds annually on Orchids, he has as much right to do so as I have to spend shillings on Primroses; but one must not confound the real beauty of a plant with its market value, as many people now do. It is not the most beautiful of all the Orchids which are the most valuable, but the rarest ones. In a word, the real love of beautiful Orchids has degenerated into a mere craze, with a dash of stock exchange speculation thrown in, just as Cayenne Pepper is sometimes mixed with champagne.—VERONICA, in *The Garden*.

ROSE GLOIRE LYONNAISE.

A description is given in the *Gardeners' Magazine*, by "Amateur Rosarian," of his result in blooming the new Rose bearing the above name, sent out last fall by a French firm. It was described as a yellow Hybrid Perpetual. The writer says, "I am not disappointed either in the shape or the size of the flowers, for they are large enough and of sufficiently good form to satisfy me, but they are not yellow; neither is the proper

place of the variety amongst the Hybrid Perpetuals. The flowers are creamy white, faintly tinted with yellow toward the base of the petals, and the growth very closely resembles that of the Teas. It is described as having been raised from Madame la Baronne de Rothschild fertilized with the pollen of Madame Falcot, a statement which is probably correct, judging from the character of the growth. Its proper place is undoubtedly with the Hybrid Teas, to which it may be a valuable addition, as the flowers will, there can hardly be any doubt, come much finer upon strong plants. I am not complaining of the quality of the blooms, but of their being described as yellow instead of white, and of the variety being classed with the Hybrid Perpetuals." This variety failed to receive favorable recognition by the Royal Horticultural Society, before which it was exhibited in April.

FLOWER LANGUAGE IN JAPAN.

An old friend of mine who has traveled among the Japanese tells me that their love of flowers and growing plants is in reality an absorbing passion. In the smallest of dwellings there is an altar-like niche, in or upon which flowering plants are arranged; but they have in some districts a most remarkable custom in connection with window gardening, which I will describe to you.

In houses wherein reside one or more daughters of a marriageable age an empty flower pot of an ornamental character is encircled by a ring, and suspended from the window or veranda by three light chains.

Now, the Juliets of Japan are, of course, attractive, and their Romeos as anxious as those of other lands. But instead of

serenades by moonlight and other delicate ways of making an impression, it is etiquette for the Japanese lover to approach the dwelling of his lady, bearing some choice plant in his hand, which he boldly, but, let us hope, reverently, proceeds to plant in the empty vase. This takes place at a time when he is fully assured that both mother and daughter are at home, and I need scarcely say that neither of them are at all conscious that the young man is taking such a liberty with the flower pot outside their window. It is believed that a young lover so engaged has never been seen by his lady or by her mamma in this act of sacrilege—at any rate, my friend tells me that during his long residence in Japan he never heard of any one being detected in the act or interfered with in any way.

The fact is, this act of placing a pretty plant into the empty flower pot is equivalent to a formal proposal to the young lady who dwells within, and this Eastern fashion is, as I think, a most delicate and harmless way of proposing to a lady. The youthful gardener having settled his plant to his mind retires, and the lady is free to act as she pleases. If he is the right man she takes every care of his gift, waters it, and tends it carefully with her own hands, that all the world may see, in a word, that the donor is accepted as a suitor. But if he is not a favorite, or if stern parents object, the poor plant is torn from the vase, and the next morning lies limp and withered on the veranda or on the path below. In a word, if you are not the right man it is quite evident that this phase of window gardening must be a difficult and disappointing one to carry on in Japan.—F. W. BURBIDGE, in *Gardeners' Chronicle*.



PLEASANT GOSSIP.

BEAUTIFUL FLOWERS.

Beautiful flowers, beautiful flowers!
Born of the sunshine and soft spring showers;
Lifting your heads from the dewy grass,
Giving your fragrance to all who pass;
Shedding your leaves through the livelong hours,
To brighten our pathway—beautiful flowers!

Beautiful flowers, beautiful flowers!
Filling with sunshine our earthly bowers;
Breathing of heaven, when fainting we lie,
Lifting our hearts to the Giver on high;
Giving us courage to fight 'gainst the powers
Of all that is evil—beautiful flowers!

Beautiful flowers, beautiful flowers!
Blooming to brighten our lonely hours;
Wafting your perfume on each soft sigh
Of the roving breeze, as it passeth by;
Teaching us faith when a dark cloud lowers,
This is your mission—beautiful flowers!

Beautiful flowers, beautiful flowers!
Low at our feet through the long summer hours;
Covering His footstool with brightness and bloom,
To deck for the bridal or robe for the tomb;
Still will we pray that no sorrow that lowers,
Shall dim thee in heaven—beautiful flowers!

—LILLA N. CUSHMAN.

CURRENTS AND EVERGREENS.

Will you please say why our Currents do not bear? They are the White Currant, in sandy soil and are very thrifty, some of them are as much as five feet high, they bloom full every spring, but not a Currant has ever shaped on them yet; they are four or five years old, and part of them are on the north of the fence and part on the east.

Can you tell me how to put out evergreens so they will live; we have bought several and they have all died but one.—MISS M. J. J., *Cherryvale, Kans.*

Currents are raised in the northern part of Kansas only with great care; in the southern part of the State it is even more difficult to succeed with them. They require to be planted in the shade of a fence, or of trees, so as to be sheltered from the sun's rays from the middle of the forenoon until four o'clock or after in the afternoon; besides, they require to have the ground underneath them to be heavily mulched in order to keep it cool and moist. Chips and sawdust have proved excellent for mulching, and this material should be laid on six inches thick.

In reply to the second question it is appropriate to call to mind the old recipe for cooking a hare; the first instruction

was to catch the hare. So in transplanting evergreens in Kansas, the first thing to attend to is getting trees of a kind that will live under favorable conditions. It has been reported that the only evergreen that really flourishes in that State is the Red Cedar, *Juniperus Virginiana*, and even that is better suited with the north-eastern part than elsewhere. It is possible that the trials of the past few years may have shown the adaptability of some other kinds, and if any of our Kansas readers can name species that may be successfully cultivated in any part of the State they will benefit Kansas people, at least, by mentioning them in our pages.

SOME FLOWERING SHRUBS.

There is a class of shrubs that grow with almost no care that are perfectly hardy here at the South, that come into bloom early and have a profusion of very pretty blossoms, and yet are not met with very often. I speak of those shrubs commonly called Flowering Peach, Flowering Apple, Quince, Pomegranate and Almond. I wonder when I see the pretty blooms why these shrubs are not more generally cultivated. Some of the flowers of the double Flowering Peach, sent me by a friend, this spring, were so lovely in coloring and form that I intend to try to get a root or cutting next fall that I may have a plant myself of this fine variety. Can you tell me if a cutting will be likely to root? Every one possessing a large flower-yard should own at least two varieties of these shrubs. Just give them a place to grow, in moderately good soil, and after transplanting you will have no further trouble with them, but much enjoyment during their blooming period.—E. B. H.

The double Flowering Peach is propagated by budding on the Peach stock. A Peach pit planted in the fall or spring will make a strong growth, so that by midsummer, or at the last of summer at the North, it can be budded within a few inches of the ground with a bud taken from a double-flowering variety, and the next season, after the stock is headed back early in spring, this bud will grow and form a tree. The double Flowering Cherry and double Flowering Plum can be similarly propagated by first raising young stocks of the Cherry and Plum, and then budding these stocks. The double Flowered Apple, or Crab Apple,

can be increased by budding on common Apple or Crab stocks. The double Flowering Japan Quince should be worked on the Japan Quince, *Cydonia Japonica*. The Flowering Almond can be budded on the Peach stock.

LILIUM CANDIDUM—HYDRANGEA.

Please tell me what treatment *Lilium candidum* requires after blooming. Ours is growing in a pail ten or twelve inches in diameter; has bloomed well.

Should *Hydrangea Hortensia* be kept in the shade or sunshine? Ours has a great many flowers just opening; the leaves do not look as vigorous as I should like them. They are on an east porch, partly shaded from the morning sunshine. What treatment shall I give them after blooming?—S. T., *Lakeport, Cal.*

Decrease the amount of water given the Lily until the plant dies down, and then let it rest, receiving only water sufficient to keep the soil from becoming quite dry, until the middle of August, when watering may be commenced again, a little at a time, increasing it as the new growth proceeds. We should prefer the open ground cultivation of this Lily in Northern California.

Hydrangea Hortensia will succeed in full sunshine or in partial shade. Give the plants what water they can use while growing, checking it off in autumn as the wood ripens, and afterwards allow the plants to remain dormant until about the first of February, when they may again be started.

PLANT TABLE—CARNATIONS.

Will you kindly describe in your July number the table mentioned on page 181, of the June number of this year, "House Plants on a Table."

Also, say when to make layers from Carnations.—V. L., *Warrenton, Va.*

The plant table referred to was described in a former volume by E. E. REXFORD, as one he has in use. We would now suggest that Mr. R. send us a sketch of his table from which an engraving can be made to accompany his own description of it in a future number.

TRAPPING ANTS.

Five years ago I procured a half dozen Paeonies that have been doing finely ever since, except that ants get away with the buds every year, in spite of many remedies I use against them. In fact, I have not had a dozen well developed flowers yet. If you can advise me as to a sure antidote you will greatly oblige.—C. B., *Deadwood, Dak.*

A method of trapping ants was given in our last number on page 177, also, in the May number page 150.

THE CODLIN MOTH.

In confirmation of our remarks on page 160, in relation to trapping the codlin moth with sweetened water and vinegar, and with whey, we have received letters from both parties there mentioned, who re-affirm all they have said about this method of catching the insect, and that they have saved their fruit uninjured thereby. It is not necessary to publish these letters, and no amount of assertion would have greater weight than the testimony offered. We shall expect soon to hear of trials enough to establish something in regard to trapping insects with sweetened acid liquids.

In this connection may be mentioned that the editor of the *Gardeners' Monthly* in his June issue, in a notice of the essay, and statements in question published in our May number, says: "The late W. L. SCHAFER, President of the Pennsylvania Horticultural Society, had an orchard measurably free from injury by the work of the codlin moth, and which immunity was purchased by a persistent use of sweetened water, by which thousands were annually caught." Such statements as this, and those we have already published, ought to have some weight, and command some attention. Hoping to hear from many who have made tests of sweetened liquids in the orchard, this spring, we await reports.

BONNET ORNAMENTS.

French artificial flowers are reported to be this season wonderful in their fidelity to nature. The Persian Lilac and Guelder Roses, flowers not very easily copied, are most exquisite, especially in coloring. The greenish tints in the latter old-fashioned blossoms are very difficult to get at exactly; and as to the former, if there is one shade of color about them there is a dozen. Artificial fruit will be all the rage on Parisian bonnets as the summer advances, and it is being made of India rubber. This is quite an innovation, as thin blown glass has always been used previously. The new fruit is most successful. The bunches of red Currants do not look quite ripe enough to be eatable, but the Plums, with the bloom on them, and the Apricots are so good that it would be difficult to tell the imitation from the true if they were placed side by side in a dessert dish.

SUMMER SUNSHINE.



The plump Willows by the streamlet's edge,
In rhythmic measure slowly sweep and sway,
And bearing summer's message on its tide,
The laughing brooklet lightly trips away,
As, dancing twixt its ever freshning banks,
It spells in flower-embroidery on the sod,
The story of the swiftly passing year,
The record of the power and love of God.

The flowers, we planted with such tender care,
Spring up to smile us welcome as we pass ;
While Buttercups, like scattered Corn, shine out,
Or gleam like golden stars, against the grass.
So, little joys spring round our pathway here ;
Life's weal or woe is made of little things.
And shall our days pass by with leaden feet,
Or shall they soar on silver shining wings ?

By ev'ry bird which carols forth its joy,
By every flower that fills its place with cheer,
God sends the message of His love supreme,
And bids us all, in Him, be happy here.
The golden, sunlit days come sifting down,
Like shining gems from heaven's sacred store;
How shall we spend the precious treasure best,
How rightly live what we can ne'er live o'er ?

New hopes, new plans, new labors and new loves,
Are freshly wakened by such morns as this
When seems the cup of life a-brim with joy,
And but to live seems quite enough of bliss ;
So, sing ye, happy birds, above our heads,
The joyous songs with which our hearts seem blent ;
While all the shim'ring hours go gliding on,
To golden days of gladness and content.

—DART FAIRTHORNE.

EARLY CANADA STRAWBERRY.

The Early Canada was the first variety that ripened its fruits on our grounds the present season, a few being picked June 12th.

The Strawberry, Sucker State, is in high repute in Illinois, and it and the Crescent are being heavily planted, and the Wilson takes a subordinate place or is altogether omitted.

CALIFORNIAN HOSPITALITY.

Mrs. W. had never seen an Orange orchard in bearing, and so, a few days ago, I borrowed a neighbor's horse and buggy to drive over to Mr. CRAM's, who lives about two and a half miles higher up the valley than we do. My neighbor in lending me his horse reminded me that he was baulky, but that I must let him stand a minute or two and then start him afresh. Well, I hitched up and got wife and two youngest chicks in the buggy, and started. We had been plowing and grading the road in front of my place, and as soon as Jim felt the extra strain on the collar he stopped. I just touched him with the whip and said, "get up, Jim," which he answered by kicking out, cow fashion, with one leg. Well, this was sweet, not one hundred yards from our door, and at a dead lock. "Pull his ears," says Mrs. W. "I have heard that is an infallible cure for a baulky horse." But Jim had got past that stage, no amount of pulling his ears and patting would make him go, unless he pleased, and it took us a quarter of an hour to go twenty yards. At last, when I began to lose patience, my wife espied our neighbor coming to our help. He took hold of Jim's head and walked with him for some distance, until he had got used to the collar, and then he jogged along quite comfortably and never gave us any further trouble.

This was a new ride for my wife, as she had never been across the City Creek wash in this direction, and so I amused myself by listening to her and little BESSIE chatting about the various beauties of the wild, uncleared land the road passed through, while our collie, Rover, and his mate Princess, were searching the brush on either side in search of jack rabbits and cotton-tails. I was surprised to hear little three-year-old BESSIE exclaim, "Look, mamma, at that beautiful Yucca." I had no idea she knew one, but there, sure enough, was a splendid specimen at the side of the road. There are plenty of them about here in two varieties, one with stiff, upright leaves, and the other with slender curved leaves, which puts one in mind of a good Dra-*cæna indivisa*, only, of course, much thicker at the base.

On we drove past the Sweed's place, a few acres cleared and planted in the great wilderness of uncleared land, his

little cabin sticking up for all the world like a sentry box, and scarcely larger. On past the Dutchman's place, who has planted his land before he levelled it, and in many places will have to run water up hill next summer. On past Mr. CRAM'S new barn, over the stone ditch and into the home yard, where stood our host awaiting us. I told him our errand. "That's right," he says, as he was tying up our horse, "and don't spare the Oranges." We walked down, clear of the house and out buildings, and then the glory burst suddenly upon us, one hundred Orange trees about fifteen years old, and as many feet high, loaded from top to bottom, inside and out, with the golden Apples of Hesperus. My wife stood still and gazed, for once speechless. She had been trying to imagine what they were like, but the reality far exceeded her expectations.

Little BESSIE was of a more practical turn of mind, and made for the nearest Orange, and fourteen months old CONNIE, as soon as she saw what BESSIE was after, wanted to be put down, too, and was soon toddling and floundering about with her little hands and arms full of the tempting fruit, frequently tumbling and scattering her golden burden, but loudly resenting any offer of help.

Of course, Mr. CRAM and myself had a learned talk on the merits of various sorts, various styles of pruning and irrigating, which would be foreign to this letter, but in the course of it Mr. CRAM said, at one cent each, at which price he is selling at now, he would make from his one acre of fruiting Oranges \$1,300 this year. He has several acres of budded Oranges which will soon be bearing, and all look clean and thrifty. While we were talking, Mr. CRAM was picking the ripest and finest Oranges he could find, and when we returned he emptied his load on the seat of our buggy, remarking that he didn't think the acid of the orange would harm the little folks. Here we were met by Mrs. CRAM, to whom we were introduced, and invited into the house and asked to stay, but, of course, we could not, and when we came away Mrs. CRAM again loaded the youngsters with Apples, and Walnuts, and extracted a promise from Mrs. W. to take the whole of the youngsters and spend a day with her.

When we shook hands at parting we felt like old friends instead of only acquaintances of an hour. Jim trotted along splendidly, the thermometer was about 75° in the shade, the young ones were happy with their Oranges, nuts and Apples. The day was perfect, and I thought of the contrast between this January and last, when I was up the most of every night, keeping out Jack Frost from my plant houses, and I thanked God who had led me here and blessed me since I had been here.—W. H. WADINGTON.

CUT-WORMS IN ONION FIELDS.

A strange cut-worm has made its appearance in the Onion fields of Orange County, N. Y., and is doing much damage by eating off the Onion plants at the surface of the ground. The worm works at night, enters into the ground in the morning, and remains quiet during day. For their extermination, Dr. THURBER, of the *American Agriculturist*, advises a trial of the method that has been successfully employed at the South. Turnip or Cabbage leaves are placed fifteen or twenty feet distant all over the field. "These leaves are first moistened, and then dusted on one surface with a mixture of one part of Paris green and twenty parts of flour. The leaves are distributed over the field with the poisoned surface downward. The operation is repeated after three or four days, two applications being usually sufficient." This method has been found successful, but it is desirable that every field should be cleared of cut-worms before planting. This can be effected by summer fallowing; small spaces can be covered with straw and brush and burnt over, which will pretty effectually destroy the pests.

RUSSIAN ELDERBERRY.

Prof. BUDD speaks in high praise of the *Sambucus racemosa*, an Elder that is a native of Europe and Asia. "Its foliage, on well kept specimens, is ornamental through the summer, and its display of large panicles of scarlet fruit during the autumn months make it specially attractive." It ranks among the large-sized shrubs, and will prove hardy in the cold Northwest, even in North Dakota.

GROUNDS OF JAY GOULD.

Every one has an idea that Mr. GOULD has an exceptionally fine property at Irvington, N. Y. Few realize, however, that it is fast becoming a place which will eventually rank with some of the best of those in Europe. The grounds are very extensive, several hundred acres, and the portions near the house are beautifully varied in character. The immediate foreground slopes to the Hudson River, and Mr. MANGOLD, Mr. GOULD's superintendent, has introduced some particularly bold and effective groups of trees, which serve to heighten and emphasize the naturally bold character of the scenery in a particularly happy manner. Much of the planting and grouping is yet in a transition state.

The magnificent new range of conservatories erected four years ago, are now filled completely, and yielding splendid results. The luxuriant health and high keeping of every department speaks volumes for the thorough practical knowledge and executive ability of Mr. MANGOLD. In the Palm house he had collected over three hundred species of Palms, and by the use of stages the very large house is already completely filled. There are fifteen houses in the conservatory range, embracing four vineries Peach houses, Camellia house, Rhododendron house, Fern house, Orchid house, Rose house, Pitcher Plants, Crottons and greenhouses. Beside the main range there is a range of smaller but indispensable houses; in these are many of the gems of the collection, *Lapageria alba*, *Ouvirandra fenestralis*, *Bertoloniias*, and hundreds of others.—J. MCP.

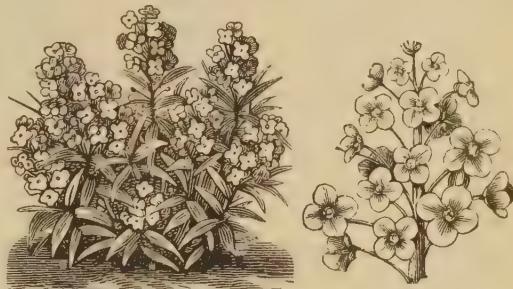
SINGLE DAHLIAS.

Some writers are falling into the error of recommending a rich soil for single Dahlias. Surely this is a great mistake. The poorest soil appears to suit them, and in what might be termed hungry soils they flower more freely and with much more refinement of character; in this respect, unlike the large double varieties, which require rich feeding at the roots, and in the case of now a few varieties, considerable disbudding. Happily single and the pretty pompon Dahlias require no disbudding. The act of cutting for decorative and other purposes is the best disbudding system which can be ap-

plied. Another reason for planting in a poor soil is that, taking the newer varieties, the flowers are quite large enough without the need for planting in good soil to make them come finer.—R. D., in *Gardeners' Chronicle*.

SWEET ALYSSUM.

Of all the lowly, unassuming inhabitants of the flower garden, I can think of none more generally satisfactory than Alyssum. The inexperienced gardener may rely upon Alyssum to do its best under almost any circumstances. Be the



SWEET ALYSSUM.

weather extremely dry and hot the little plant will patiently wait until a cooler spell and a little moisture comes, and then will astonish us by its almost hourly growth and by the abundance of tiny blossoms. Let the weather become quite cool and rainy and Alyssum seems to revel in the damp, cool time. Here, in Georgia, even until December has come, does Alyssum greet us with a profusion of flowers. Last year, on the 17th of December, a bushel of blooms might have been gathered from one bed in my flower garden. Never had the plants been so full of bloom.



NEMOPHILA.

A bed edged with one row of Alyssum and a second row, six or eight inches from it, of *Nemophila insignis* is a beautiful sight when in bloom. The blue flowers intermingling with the white make a beautiful contrast, forming an edging at least a foot and a half in width.—H., *Greene Co., Ga.*

LAYERING SHRUBS AND VINES.

Amateurs who desire to increase their favorite shrubs, Roses or vines, will find layering the best method, and July the best month, to perform the operation. Although too slow a process for nurserymen who desire to multiply their stock rapidly, it is far the best method for all who only require a few extra plants. By consulting back numbers of the MAGAZINE, all can make themselves familiar with the operation. Select the north side of the plant to lay down the branch to be rooted, and pulverize the soil well where the new plant is to take root. *Daphne cneorum*, *Exochorda*, Purple Fringe, *Aristolochia siphon* and some other shrubs, as well as some of the hardy Roses, will require two years to become well rooted. A few shrubs and vines refuse to root from layers; these are grown from seeds and by grafting, and as the seeds require considerable care and experience, their propagation had better be left to the nurserymen. Layered plants of the Clematis, having an abundance of eyes near the root, are more valuable for planting than the grafted, a matter of vital importance to persons about to plant the Clematis. Imported plants, usually grafted, often have but a single sound eye, and that several inches from the roots. If in any way the intervening wood becomes injured or broken the plant is rendered worthless.—LEVANT COLE.

SOME BIG PANSIES.

I have received the June number of VICK'S MAGAZINE, and noticing the paragraph on Violets and Pansies, I was reminded of some Pansies I saw this spring. One day, during the latter part of April, some friends, my brother and myself, visited the conservatories of Mr. CORNING, a few miles from Albany. There are a number of greenhouses, and we were shown through them by an attendant who kindly answered our many questions.

We went to see the display of Orchids, of which Mr. C. has many thousands. The flowers were very delicate and beautiful, and one wonders how they can grow and thrive in only moist, warm air, with no earth at all at the roots. There were many other rare and beautiful plants, Palms, Bananas, etc.; but what pleased me most was the bed of enormous

Pansies, some of them measuring three and a half by three and a quarter inches, said to be the largest grown. We had never seen any thing like them before, and if Mr. VICK has any Pansy seed that will produce as large flowers, I must have some of it another season. I thought I had grown some very large Pansies; have had them measure two and a half by two and a quarter inches, but mine seemed small beside these very large ones.—E. W. L.

CALIFORNIA NOTES.

One of our friends who went to California last January, and has located a few miles south of Los Angeles, writes in glowing language of the fruit capacities of the country. In regard to some useful and ornamental plants, he says: "The Eucalyptus makes a perfectly wonderful growth here. One tree, near my house, two years from seed, is now fourteen feet high, and five inches through the stem one foot from the ground. I have fifty one-year-old trees of it, averaging eight feet high, pyramid-shaped, with a spread of six feet at the ground. These are being raised for fuel. At five years they will be ten to twelve inches through and forty to fifty feet high. The wood is hard and burns well."

"One *Musa ensete* I saw in Los Angeles I must mention. It was three years from seed and stood eighteen feet high, and measured six feet in circumference at the base. The last new leaf, just out, was ten feet long and eighteen inches wide. The mid-rib bright red, and as large as a man's arm."

"What I could tell of Roses, Heliotropes, Ivy, Geranium, *Datura arborea* with its hundreds of hanging bells will make you at least wish to visit this western coast."

IMPATIENS EPISCOPI.

Another species of Balsam has appeared in horticultural circles, and bears the name above. It is a native of Central Africa, and grows on the mountains at an elevation three thousand feet higher than *Impatiens Sultani*, and consequently it will, probably, prove somewhat hardier than that popular kind. The flowers are freely produced, and are of a bright, rosy crimson color.

THE PAWPAW.

A native tree unknown to many of our readers is the Pawpaw, or, as it is sometimes called, the Custard Apple. This tree belongs to a family of plants the members of which are mostly of tropical habitats. Our Pawpaw tree is botanically known as *Asimina triloba*. The first of these names is derived from the word

latter tree is widely different in character and relationship from our Pawpaw. The name, Custard Apple, the tree and fruit bear in common with the Custard Apples of the East and West Indies, trees of the same natural family, *Anona squamosa* and *A. muricata*, the former more particularly distinguished as the Sweet Sop



THE NORTH AMERICAN PAWPAW, *ASIMINA TRILOBA*—FLOWERING SHOOTS AND YOUNG LEAVES.

Asiminier, by which the tree and fruit were called by the early French settlers in this country, but the origin of this French word is unknown. The specific name is evidently applied on account of the form of the fruit-cluster, which most frequently consists of three parts or three fruits united on one peduncle. The name Pawpaw had probably been given this tree on account of the resemblance of its fruit to that of the *Carica papaya*, of India and South America, although the

and the latter as Sour Sop. Four species of *Asimina* in all grow in this country, but all, excepting the one here figured, are confined to the south, and with but little range there. *A. parviflora* is found in woodlands along the coast from Carolina to Florida; it grows only to a height of two to three feet. It bears greenish purple flowers, which are about half an inch in diameter. *A. grandiflora* is of no larger growth; it has yellowish white flowers about three inches in diameter. This

species is found from Georgia to Florida. Another species found in the same region is *A. pygmæa*, growing only from six inches to a foot in height.

Asimina triloba grows to a height of fifteen to twenty feet, and occasionally higher. It is found sparingly scattered in this region and westward and south-

which is occasionally seen. The color of the flower of *Calycanthus floridus* is nearly or quite the same. There are several distinct pistils, or carpels, and those that perfect themselves, bearing seed, become fleshy and about the size of a Fig. Very frequently three of these fruits hang in a cluster. The fruit, which ripens in the latter part of summer, is a sweet, yellowish, pulpy mass, of a flavor which is not at first relished, but for which a taste can be acquired. Each fruit contains about twelve seeds. It is possible that by long continued cultivation and careful selection of the best seedlings an improvement in the quality of this fruit might be obtained. A well known botanical treatise notices that the leaves of *A. triloba* "are used to hasten the ripening of abscesses."

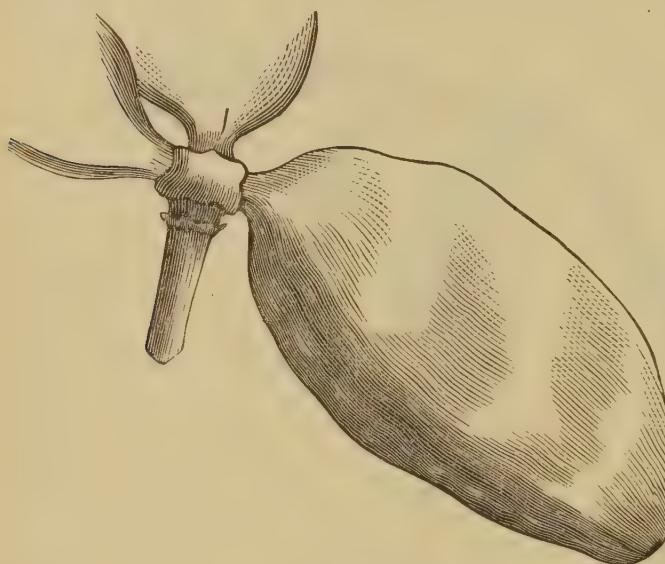
The tree is quite ornamental as a lawn tree, being of a pyramidal form, and having a dense foliage. It is, also, interesting on account of its tropical relationship, and it should find a place in every large collection of strictly native trees. We do not know that the trees are ever kept for sale in the nurseries, though they can be easily raised from the seed.

THE PEACH CROP.

While the Peach crop is cut short in many parts of the North, it is probable that in the great Peach regions of Delaware and Maryland there will be an abundant yield. It is estimated that the crop there will be the greatest in ten years. It is thought that Kent County, Delaware, will produce from a million and a half to two millions of baskets.

ROSE BUGS.

The *Rural New-Yorker* claims to have made experiments with various substances to destroy Rose bugs, and says that the only one that can be relied upon with certainty is Pyrethrum, Buhach, or Persian insect powder. It can be applied as dust or in solution.



FRUIT OF ASIMINA TRILOBA.

ward through the Ohio and Mississippi valleys. It is usually found growing on the banks of streams. In some of the deep valleys near the Schuylkill River, it was formerly quite abundant, forming thickets of several acres in extent. In Kentucky and Tennessee it reaches its finest development, and it is not uncommon to find trees there from twenty to thirty feet high, and from six to eight inches in diameter.

The drawing from which our engraving was prepared was made from a specimen taken in the western part of this county, about the last of May, and is of natural size. The flower and leaf-buds start at the same time, and the tree is consequently in full bloom while the leaves are quite small. The full grown leaves are from eight to twelve inches long. The flower has a calyx of three parts; the petals are in two series of three each, six in all. The inner petals are only about two-thirds of the size of the outer ones, and all of them are green when they first open, but gradually change to a chocolate color, or reddish brown, an unusual color for a flower, but

OUR YOUNG PEOPLE.

AMONG THE PINES.

VI.

The water in these rivers is almost always high in the spring, because of the vast quantities of snow which melts in the northern woods. This high water stage generally comes about the time the drives reach the ends of the rough portions of the rivers. Here the banks are low in many places, and the high water floats the logs over them, and many are left among the trees and bushes when the water falls. If the water goes down slowly there is generally plenty of time to get the logs back into the stream before they are "hung up." But if it falls suddenly there is much hard work to be done in rolling these stranded logs to the bank. When the water is up the men whose business it is to attend to the rear of the drive, "sack" the logs which have floated out of the river. "Sacking" is wading in the water and pushing these logs before you, or lifting them over shallow and muddy places until deep water is reached. These men think nothing of working in the water all day long. The "sackers" usually discard river boots and wear low shoes, with heavy caulked soles. These are preferred because they can be readily emptied of water when the wearer happens to get a chance to work for a time on high land.

"Rearing out" is following the main drive and picking up logs which the water has carried over the banks. If the water is not high enough to float any logs out of its channel, the drive is said to have a "clean rear."

It looks as if it might be very easy to ride a log when you see a riverman perform that feat, but if you try it you are quite likely to make up your mind very soon that it is hardly as easy a thing to do as you thought. The most of the river boys have acquired such proficiency in the way of log-riding and rolling that they will stand erect on a small log and have no difficulty in balancing themselves as the log rolls. But the raw hand will, nine times out of ten, lose his balance

before the log has made one revolution, and a ducking results. When a riverman wants to cross a stream he never thinks of looking for a boat. He mounts a log, and using a pike-pole or peevey as a paddle, he accomplishes his desire, and seems to do it with the greatest of ease. I have often seen two men standing on the same log, which they kept rolling swiftly under their feet. I do not remember of ever seeing any of them lose their footing or balance and fall into the water.

It is now the practice of the owners of these logs to combine several drives in one. Formerly each lumberman kept his logs by themselves as far as possible in taking them down the river. A contract for driving the entire lot of logs put in on certain streams is now given to some experienced riverman, and he has sole charge of them from the time they leave the landing until the "big boom" is reached. Of course, it would be impossible for him to oversee the vast work alone, so he divides the crew into squads and appoints a foreman for each squad. He is the general in command, with reliable assistants, and the work is carried on as systematically as a campaign. There is order everywhere. Each man knows precisely what he is expected to do, and if he fails to do it he is discharged promptly. None but reliable and efficient men are wanted, and only such will be kept.

When the camp in the woods breaks up, the horses and oxen are taken into the settlements, where they are left with farmers who have the privilege of working them through the summer in payment for taking care of them. Some large firms have cleared land in the woods, where they raise all the hay they will need for the winter, and these firms pasture their cattle about the camp, requiring no work of them through the summer months. A man is hired to stay there and "keep shanty," and he sees that the property left in his charge is properly taken



SACKING AND RIDING LOGS.

care of. In haying time several men are sent up to help him cut and gather in the grass, which grows luxuriantly along the lowlands. The expense of removing everything in spring, when the camp is broken up, is so great that it pays the firm to keep a man there and take care of them, even if no haying is done. Of late years, large camps have added a blacksmith shop to their other conveniences, for there must be shoeing of horses and cattle every day, and sleds need repairing very often. The tools used in these shops, with many sleds, saws, axes, and other camp equipage, make quite a

valuable amount of property, which it would not do to leave unwatched for several months in the year. The roving Indians would steal everything portable, and destroy the rest, or forest fires would burn it up. In many places, small farms have been developed about the camps, and Potatoes, Oats, and a few other vegetables which can be grown in high latitudes, are raised, often sufficient in amount to supply the demand for quite a crew of men. Corn cannot be ripened on these pinery farms, for the season of warm weather is too brief.—EBEN E. REXFORD, *Shiocton, Wis.*

STELLA RAY'S JOURNAL.

June 1. This has been a dreary day in doors with us, though a glorious one outside. Grandpa Starr roused from his stupor, this morning, but has been delirious and talking all day. It seems as though the years have rolled back for him, for he thinks himself sick in his old southern home, the same where papa accidentally found him so ill during the war, and his daughter nearly distracted about his condition. Papa gave him regular treatment until he recovered, and thus it was that he learned the noble character of his future wife.

This afternoon, grandpa looked steadily at papa a few moments as he lay resting on the lounge, and then whispered to mamma: "He may be a very good doctor; but watch him! for he's nothing but a Yank, after all."

Uncle George and Auntie Starr arrived

this evening. I could not help showing my joy in spite of the trouble. When Uncle George first spoke to grandpa the latter looked at him inquiringly, and asked:

"Are you here on furlough? I didn't expect you." The answer was, "Yes." Then grandpa looked at Auntie Starr, in a puzzled way, and asked:

"Where did you pick her up?" Then, pulling uncle down by the sleeve, he whispered: "Do you see that northern spy? He turns out to be a doctor, and you'll have to be civil with him, for he's saved my life. I was crazy as a loon before he came."

Uncle George is dreadfully worried because grandpa is not rational, and I heard papa tell him that he thinks he will be so in a few hours more; but that he will probably sink soon after from the

exhaustion consequent upon his condition and age. Then he added, "You are both tired, to-night; in the morning we'll have a long talk about his case."

And that makes me think of the locked wardrobe. It was opened this morning, and when papa looked in he only said, "Just as I suspected; we'll disturb nothing until George shall be here." Mamma exclaimed, "O, oh!" and could not keep from weeping. But I do not yet know what dreadful thing they found, and shall never ask, lest it prove as worrying as did the explanation about Mehitable.

2. I do not care to write in my journal to-night, but must jot down what most impresses me. Uncle George insisted on staying with grandpa last night, so mamma lay on the lounge in the sick room and exchanged duties with him. They reported that he rested some, but kept up a muttering most of the time. This morning he began talking again, and made special arrangements with Uncle George to signal a river boat; "For," said he, "I must get away from here before your furlough is out. You cannot go away again and leave me here." Uncle promised to attend to it, but his eyes moistened so quickly that I knew what he was thinking of.

After breakfast, papa told Uncle George about the wardrobe mystery. As I was present and could not help hearing, I know now all about it.

"More than a year ago," said papa, "I accidentally learned from a druggist, a personal friend, that our father here was making frequent purchases of patent medicines. I did not tell your sister, because I knew it would mortify and trouble her. He seemed in ordinary health and joked about how much he ate and slept. But I had noticed that he was becoming subject to conditions of sluggishness, and at other times of undue exhilaration. In other words, sometimes his brain was oppressed, at others, excited. So I had a talk with him at once, approaching the subject kindly and cautiously; but he became so nervous and embarrassed that it was painful to both of us. He is always a gentleman, and he said he meant no disrespect to me as a physician; and I quickly assured him that it was only of his health I was thinking. He then spoke of some little infirmity he had

which amounted to nothing, but which he had hoped to cure, he said. I assured him that plenty of nourishing food was all he needed, that more than this would certainly impair his physical and mental powers. But he must have continued his experimental medications, for he soon became subject to strange attacks of the head and stomach, which could be accounted for in no other way, and the beginning of this illness was one of them. Your sister has been disturbed for some time because of his wardrobe being always locked and the key not accessible. So, yesterday morning, I had it opened. Come and take an inventory."

Then papa threw open the door. Uncle George stood speechless a moment, and then exclaimed, "Good Heavens!"

There were rows and groups, and parcels of empty, half empty and full bottles of all sorts of ready reliefs, safe cures, sure remedies, new discoveries, old reliables, compounds of Burdock, of Clover, of Dandelion, of Hops and of Smartweed, and other mixtures whose advertisements show how you look "before taking" their stuff, and then how you look "after taking" enough!

It was really very dreadful, and I don't wonder that mamma wept at the sight. Presently Uncle George said, "The poor man must have had a mania in this direction."

Then the two had a long talk about that sort of thing, and I do wish I could put down all that papa said about it, because I want not only to know how to take care of myself, but to be of use to others when I am older. I have already learned some things about taking care of the sick. Nourishment is given to grandpa every hour, the same as medicine, and I have learned how to make beef tea, also the extract of raw beef, which is given with a stimulant first added, for special reasons, papa says.

3. I do not want to write to-night; but some day I may be glad that I recorded some things while they were fresh in my mind. Even Will may care for items from this part of the despised journal. I forgot to say that it was decided he should not be sent for, on account of the distance, and the near approach of commencement exercises. So he has been written to of the illness and the decision.

Poor grandpa watched all day yesterday for the boat that was to take him away, and charged mamma to have his things ready so that he should not be left. Miss Haven, knowing of his restlessness, brought a freshly made Hop pillow for his use, saying modestly to papa, "Per'aps hit might make 'im sleep, 'ops is so lullin'."

About midnight grandpa grew quieter and finally settled into a natural sleep, which continued until late this morning, when he awoke with his mind clear, to the great joy of all. He held uncle by the hand for an hour, and I don't know which of the two looked the more satisfied.

Harvey and Effie were allowed to go in and kiss grandpa, which made them very happy. He talked but little all day and often seemed lost in reflection, though many times looking around on each one lovingly and smilingly. Once, as I entered the room with his nourishment, he was just saying to Mr. Sheldon, "I am greatly blessed in my children," and seeing me, added, "and in my grandchildren," which remark will always be a pleasant memory, however much of a simpleton Mr. Sheldon may think me.

During the day Uncle George became hopeful of grandpa's recovery, but papa thought his feeble and irregular pulse indicated too low a grade of vitality to base much hope upon. But his mind seems stronger and clearer than for many months, which is a great comfort.

Of course papa has turned over some of his patients to other physicians, but responds to his office calls. To-day, as he was about to enter the back way, he heard Sambo's voice, evidently in explanation of an anatomical map, for he was saying: "—an' dis heah am de clappah what shets off yer bref when ye die, an' dese am de pipes what goes down into de system."

"Sambo," said papa, stepping quickly in, "did you ever hear of the frog that puffed himself out trying to be as big as an ox, until he burst himself and died?"

"No, sah," said Sambo, in great confusion, as he hastily took himself outside, while the caller acknowledged he had drawn the fellow out by pretending ignorance himself, adding, "It is as good as a circus to come here sometimes when you are out."

I forgot to mention that during the talk

which followed Uncle George's inspection of the wardrobe, he remarked that he had lately read that "patent medicines are estimated by a leading English medical journal to cause the death of 150,000 people a year."

4. This is morning. The house is very still. There is crape on the house and office doors. At ten o'clock last evening I was called down stairs. Grandpa had roused from a quiet sleep, and seeing only Auntie Starr present, asked for the family. When we were gathered around him, he took a hand of papa's in both of his, and said:

"You have been a good and true son to me. Forget my misguided judgment of the last few months. You have been patient with an old man's weakness. I see it all clearly now. Ah! I see everything clearly. God bless you."

Then he heard Mr. Sheldon's name mentioned, and said, "No, no; I need none but my own about me now. I know in whom I trust. Tell Will to live so as to be an honor to the christian name."

Then he talked to each of the others and said the most touching things. To me, he said:

"Stella, my child, you have been the pride of my heart. You have not known how much I loved you. An old man must live a good deal within himself lest his strong interest and love become an intrusion to the younger lives about him. You have always been a good girl to me. There is nothing to regret. Win and keep the pearl of great price as your chief wealth and ornament. God bless you! Farewell."

(There is so much pathos in these words, so much to stir up the very depths of feeling that I can hardly write them for tears.)

Harvey and Effie were brought to him in their night clothes. When he had kissed them both, he said:

"Harvey, boy, grandpa is going away. This kind of going away is called dying. But you see I am not afraid. Always serve God, children, and you'll never fear to die."

They cried piteously and were taken away and soothed to sleep by gentle, sympathetic neighbor friends in the house. His eyes followed them, and then turning to us, in tenderest tones, he said:

"Let us be very quiet now; there is

nothing here to weep for, but much to be thankful for. God is very good." And these were his last words.

I do wish now that Will had been here; such a beautiful passing away is never to be forgotten. I have always thought of the fact of death with a shudder, but shall feel very differently hereafter.

30. The thought of the last sad records in my journal has kept me from opening it, until now I feel that some entries must be made in order that I may be ready for the new month. Uncle and Auntie Starr staid with us until the twelfth. Brother Will

got home just before they left, and realized his loss as he could not before. We are all glad that just now is his time to be at home. Papa says the magnetism of his abounding life and spirits will fill the house. Carrie Stone writes that she will visit me the second week in July, if convenient; that she had aimed to come before Will should be at home, because she thought I'd like him to myself during vacation, but was foiled. Of course, she'll have to come; but mamma is to be away then, and what *shall* I do with her! I wonder if she still keeps a journal.

THE WAYS OF MONKEYS.

As a general rule, the monkeys go early to bed, rise late, and establish their night encampment on the summit of rocks, if possible. The first thing they do in the morning is to warm themselves, for which purpose they climb to the top of rocks and trees and turn slowly round in the sun till their hair, wetted by the nightly dew, is entirely dry. This preliminary operation is followed by a thorough cleansing of the skin, and, immediately after, by breakfast. Every eatable thing suits monkeys, fruits, onions, roots, seeds, nuts, leaves, insects, eggs, young birds, snails, and they enjoy generally a copious, free board.

Their notions concerning property are very defective. "We plant and the apes harvest," says the Arab of Eastern Soudan, with his natural apathy in the presence of facts and events that he can not prevent. Does not the monkey show in this a pronounced analogy with mankind, who, since the existence of the world, though under severe penal legislation, find it so hard to observe the difference between mine and their's?

The hungry crowd of quadramana infest fields and gardens; neither lock nor bolt, neither fence nor wall is an obstacle to those robbers, who steal and destroy everything in their way, whether it be eatable or not. It is not surprising to any one who has witnessed such degradations, to see the farmers entertain a mortal hatred against these dark, grinning thieves; and the Arabs range them in the category of evil spirits. When they are surprised in their mischievous work, they flee like cowards toward the nearest trees or rock, the mothers carry-

ing their children. Only when flight is impossible do they show fight and attack men as well as the biggest beast of prey, and even the elephant with that impetuous temerity which distinguishes the coward in despair. * * * I was once the owner of a highly educated chimpanzee. He knew all the friends of the house, all our acquaintances, and distinguished them readily from strangers. Every one treating him kindly he looked upon as a personal friend. He never felt more comfortable than when he was admitted to the family circle and allowed to move freely around, and open and shut doors, while his joy was boundless when he was assigned a place at the common table. * * * Obedience to my orders and attachment to my person and to every one caring for him were among his cardinal virtues, and he bored me with his persistent wishes to accompany me. He knew perfectly his time for retiring, and was happy when some one of us carried him to the bed-room, like a baby. As soon as the light was put out he would jump into the bed and cover himself, because he was afraid of the darkness. * * * The animal fell ill of mumps, followed by pneumonia. I had seen many sick chimpanzees, but never one of them behaved as he did. I engaged two competent physicians to take charge of him. He knew them from the first day, allowed them to feel his pulse, showed his tongue, and directed the hand of the attendant doctor to the painful swelling, which had to be cut open afterward, there being danger of suffocation. The doctors would not use chloroform, out of regard to the affection of his lungs;

but fearing the chimpanzee would not keep quiet during the operation, engaged four strong men to hold him. The sick animal did not submit to that rough treatment, but excitedly pushed the men aside, and then, without any compulsion whatever, but in compliance with the fondling words of his nurse, in whose lap he was sitting, offered his throat. The operation was performed, the ape never flinching or complaining. He felt afterwards much relieved, and expressed his gratitude by pressing fervently the hands of the physicians and kissing his nurse.

But his life was not spared; he died from pneumonia. Meekly and patiently he bore his long agony, and died more like a man than an animal. The doctor told me that never in his life, at any death-bed, had he felt an emotion similar to that which seized him at the humble couch of the poor monkey.

In Berlin, many beautiful eyes shed tears when the news of the sad end of my widely known and generally petted chimpanzee was spread.—From "The Ways of Monkeys," in *Popular Science Monthly*, of June.

EDITOR'S MISCELLANY.

AMERICAN EXHIBITION IN LONDON.

The promoters of the American Exhibition to be held in London, next year, are rapidly perfecting their arrangements, and it is probable that the collection which will there be brought together will form one of the greatest expositions of American industry ever made. The horticultural aspects of the grounds will present the native flora of this country by the characteristic plants of each State and Territory. It is intended to import directly from the different States collections of the wild plants and trees. The cultivated plants peculiar to the different parts of this country are also to be shown, and representations of our Corn, Cotton and Tobacco fields will be made, and as large a collection as possible of the cultivated fruits. The exhibition is to open in May and continue until October.

AMERICAN SEEDSMEN.

The third annual convention of the American Seed Trade Association was held in this city, June 9-11. C. W. CROSSMAN, of this city, was elected President.

The objects of this society are the business interests of the trade. The rate of postage charged for the transmission of seeds by mail was one of the subjects considered. Resolutions were passed strongly indicating a desire for a reduction of the rate, and asking attention of the government authorities to the subject.

A discussion was held in regard to the duties on seeds, and a committee appointed, consisting of WM. MEGGAT, R. A. ROBBINS, E. A. CHASE, J. BOLGIANO, JAMES VICK, W. A. BURPEE and D. F. KNICKERBOCKER, to wait upon the Secretary of the Interior, and represent the views of the society, and ask for uniform rules of valuation at all ports of entry. The same committee was instructed to call upon the Commissioner of Agriculture to make some suggestions relative to the distribution of seeds by the government.

The well known seed grower, C. L. ALLEN, of Garden City, Long Island, read a valuable paper before the Association on the subject of sexuality in plants, with its practical application to the business of seed raising.

On the last day of the meeting the resident members of Rochester entertained the visitors and invited guests by a ride by steamer on the Genesee river, Lake Ontario and Irondequoit Bay, a dinner at a popular summer hotel, at "the bay," and a re-

turn ride to the city by rail. The day was a perfect one, the company in the most congenial spirits, the dinner excellent, the music of the Lincoln Band cheering, and the presence of the Mayor of Rochester gave additional dignity and good feeling to the occasion.

Although not definitely decided, it is probable that the next annual meeting will be held at Saratoga Springs, in August, of next year.

THE BLOOMING OF GRAPE VINES.

A record kept for a number of years of a garden in this city, shows the dates of the blooming of the vines for six years previous to the present. These dates are as follows :

1879,	vines bloomed	June 15
1880,	"	" 13
1881,	"	" 14
1882,	"	" 27
1883,	"	" 23
1884,	"	" 17
1885,	"	" 17

STORMS AND EARTHQUAKES.

The lightning and wind storms of the last half of May and first half of June, in many parts of the country, were very destructive of both life and property. Whole villages have been ruined, miles in extent of farm crops and forests have been destroyed. These storms have not been confined to any particular region, but nearly every State has suffered to some extent. Many foreign countries have been similarly visited. Many earthquakes have been reported, the greatest being in Cashmere, and which has several times recurred, causing a great destruction of life and of property to an immense amount.

CAUSE AND PREVENTION OF CHOLERA.

Cholera; its history, cause and prevention, is the title of a manual written by EZRA A. BARTLETT, M. D., and published by H. H. BENDER, Albany, N. Y. Price 30 cents. This treatise is entirely reliable and should be widely circulated. It reflects the most advanced ideas in regard to the best hygienic measures for the prevention of the dread disease. Its author is one of the most highly intelligent and skillful medical practitioners in the country, and he has done the public most excellent service in giving in a small compass the valuable information the volume contains.